## **Introduced by Assembly Member Leno**

February 22, 2007

An act to amend Sections 19161 and 19161.3 of the Business and Professions Code, and to amend Sections 108920, 108921, and 108922 of the Health and Safety Code, relating to fire retardants.

## LEGISLATIVE COUNSEL'S DIGEST

AB 706, as introduced, Leno. Fire retardants: toxic effects.

Existing law makes various findings related to the toxicity of certain fire retardants containing chemicals known as brominated fire retardants (BFRs) and chlorinated fire retardants (CFRs), and prohibits a person from manufacturing, processing, or distributing a flame-retardant part of a product containing more than one-tenth of 1% of prescribed retardants.

This bill would revise and extend the findings relating to fire retardants, and would, commencing January 1, 2010, require all seating, bedding, and furniture products to comply with certain requirements, including, but not limited to, the requirement that they not contain brominated fire retardants or chlorinated fire retardants.

Existing law, the Home Furnishings and Thermal Insulation Act, requires all mattresses and box springs manufactured for sale in this state to be fire retardant. Existing law requires the Bureau of Home Furnishings and Thermal Insulation to adopt regulations requiring that fire retardant mattresses and box springs and other bedding products meet a specified resistance to open flame test.

This bill, commencing March 1, 2009, would require the bureau to replace its standards for prescribed bedding products sold or offered

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for sale in this state, including, but not limited to, the requirement that they not contain brominated fire retardants or chlorinated fire retardants and be labeled as prescribed, and would make conforming changes.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. Section 19161 of the Business and Professions Code, as added by Section 14 of Chapter 760 of the Statutes of 3 2006, is amended to read:

19161. (a) All mattresses and mattress sets manufactured for sale in this state shall be fire retardant. "Fire retardant," as used in this section, means a product that meets the standards for resistance to open-flame test adopted by the United States Consumer Product Safety Commission and set forth in Section 1633 and following of Title 16 of the Code of Federal Regulations. The bureau may adopt regulations it deems necessary to implement those standards.

- (b) All other bedding products that the bureau determines contribute to mattress bedding fires shall comply with regulations adopted by the bureau specifying that those products be resistant to open-flame ignition the degree of fire or flame retardance.
- (c) All seating furniture sold or offered for sale by an importer, manufacturer, or wholesaler for use in this state, including any seating furniture sold to or offered for sale for use in a hotel, motel, or other place of public accommodation in this state, and reupholstered furniture to which filling materials are added, shall be fire retardant and comply with the regulations adopted by the bureau specifying the degree of fire or flame retardance, shall be labeled in a manner specified by the bureau, and shall comply with Section 108922 of the Health and Safety Code. This does not include furniture used exclusively for the purpose of physical fitness and exercise.
- (d) Regulations adopted by the bureau for other bedding products shall not apply to any hotel, motel, bed and breakfast, inn, or similar transient lodging establishment that has an automatic fire extinguishing system that conforms to the specifications established in Section 904.1 of Title 24 of the California Code of Regulations.
  - (e) This section shall become operative on July 1, 2007.

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SEC. 2. Section 19161.3 of the Business and Professions Code is amended to read:

19161.3. All flexible polyurethane foam in the form of slabs, blocks, or sheets, or which is shredded (loose or packaged), except polyurethane foam sold for use as carpet underlayment and polyurethane foam which cannot reasonably be expected to be used in or as an article of furniture or a mattress, that is offered for sale to the general public at retail outlets in this state for noncommercial or nonmanufacturing purposes, shall be fire retardant. "Fire retardant" as used in this section, means a product that meets the regulations adopted by the bureau comply with the regulations adopted by the bureau specifying the degree of fire or flame retardance.

- SEC. 3. Section 108920 of the Health and Safety Code is amended to read:
- 108920. The Legislature finds and declares all of the following:
  (a) Chemicals known as brominated flame retardants (BFRs) are widely used in California. To meet stringent fire standards, manufacturers add BFRs to a multitude of products, including plastic housing of electronics and computers, circuit boards, and the foam and textiles used in furniture.
- (b) Polybrominated diphenyl ether (PBDE), which is a subcategory of BFRs, has increased fortyfold in human breast milk since the 1970s. Women in California carry more PBDEs in their bodies than anyone else studied in the world.
- (c) PBDE has the potential to disrupt thyroid hormone balance and contribute to a variety of developmental deficits, including low intelligence and learning disabilities. PBDE may also have the potential to cause cancer.
- (d) Substantial efforts to eliminate BFRs from products have been made throughout the world, including private and public sectors. These efforts have made available numerous alternatives safe to human health while meeting stringent fire standards. To meet market demand, it is in the interest of California manufacturers to eliminate the use of BFRs.
- (e) In order to protect the public health and the environment, the Legislature believes it is necessary for the state to develop a precautionary approach regarding the production, use, storage, and disposal of products containing brominated fire retardants.

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(a) Chemicals known as brominated fire retardants (BFRs) and 2 chlorinated fire retardants (CFRs) are widely used in California. 3 To meet stringent fire safety standards, manufacturers add BFRs 4 and CFRs to a multitude of products, including the foam and 5 fabrics used in virtually all commercial, residential, and institutional furniture and mattresses. On June 1, 2006, two 6 categories of fire retardants known as penta brominated diphenyl 8 ether (PentaBDE) and octabrominated diphenyl ether (OctaBDE) were banned for use at levels higher than one-tenth of 1 percent in virtually all new products, including the plastic housing of 10 electronics, computers, and circuit boards as a result of legislation enacted in 2003 and 2004.

- (b) Many fire retardants migrate in air, soil, or water, and accumulate in people's bodies and the environment. For example, Polybrominated diphenyl ether (PBDE), which is a subcategory of BFRs, has increased 40-fold in human breast milk since the 1970s. Women in California carry more PBDEs in their bodies than anyone else studied in the world. PBDE has the potential to disrupt thyroid hormone balance and contribute to a variety of developmental deficits, including low intelligence and learning disabilities. PBDEs are structurally similar to dioxin, furans, and polybrominated biphenyls which are known to cause cancer. In addition to California's ban enacted in 2003, PentaBDE and OctaBDE have been banned in several other states and in the European Union.
- (c) According to an American Public Health Association Consensus Resolution, virtually all organo chlorides that have been studied exhibit one or more serious toxic effects, including endocrine dysfunction, developmental impairment, birth defects, reproductive dysfunction, immunosuppression, and cancer, often at extremely low doses. Organo bromides are known to exhibit even more serious effects.
- (d) Recent studies indicate that BFRs and CFRs have migrated into the environment, and have been detected at high concentrations in fish, as well as marine mammals such as dolphin and harbor seals, indicating that they are already bioaccumulating in the food chain and in marine wildlife. Fish and also meat consumption are partly responsible for increasing levels of some BFRs and CFRs in humans.

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(e) Apart from toxic effects in humans and animals from direct exposures, these chemical substances have been disposed of in ways that contaminate soils, groundwater, drinking water, ambient air, and natural ecosystems. Production and distribution of tens of millions of pounds of these potentially toxic substances represents an ongoing experiment with the health of the people and environment of California without an adequate scientific understanding of the long-term consequences of exposure to BFRs and CFRs.

- (f) According to the federal Centers for Disease Control and Prevention, infants and children are particularly prone to absorb BFRs and CFRs through direct physical or oral contact with these compounds in furniture, inhalation of furniture dust containing BFRs and CFRs, and via ingestion of these substances from their mothers' milk and from their diets. Rates of pediatric health problems, such as leukemia and brain cancer in children, testicular cancer in adolescents, birth defects, and neuro-developmental disorders, including, but not limited to, dyslexia, mental retardation, attention deficit/hyperactivity disorder (ADHD), and autism, are steadily rising.
- (g) Over the last 30 years, there have been hundreds of scientific journal articles and reviews citing these and other negative health impacts in people and in animals resulting from exposure to brominated and chlorinated fire retardants.
- (h) Substantial efforts to eliminate CFRs and BFRs such as PBDE and OBDE from products have been made throughout the world, including the private and public sectors. These efforts have made available alternatives safe to human health while meeting fire safety standards.
- (i) Fire safety education, smoke detectors, building sprinkler systems, decreasing numbers of smokers, and mandated "fire-safe" cigarettes with lower ignition propensity have greatly reduced the fire risk posed by furniture and mattresses.
- (j) In order to protect the public health, worker safety, wildlife, and the environment, the Legislature believes it is necessary for the state to prohibit the use of chlorinated and brominated fire retardants in applications such as commercial, residential, and institutional furniture, mattresses, box springs, futons, and bedding products including pillows, comforters, and blankets, where the probability of human exposure and improper disposal are high,

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1 especially when there are practical and economically feasible

- 2 alternatives that can maintain similar or superior fire retardancy.
- 3 For these and other reasons, in 2003 the Legislature asserted that
- 4 it is necessary for the state to develop a precautionary approach
- 5 regarding the production, use, storage, and disposal of products 6 containing two specific BFRs. The Legislature hereby expands its
- 7 concern to include all BFRs and CFRs in furniture, mattresses,
- 8 *and bedding*. 9 SEC. 4.

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- SEC. 4. Section 108921 of the Health and Safety Code is amended to read:
- 108921. For purposes of this chapter, the following definitions apply:
  - (a) "Brominated fire retardant" means an organobromine chemical or organobromide used as a fire or flame retardant.
  - (b) "Chlorinated fire retardant" means an organochlorine chemical or organochloride used as a fire or flame retardant.
    - (c) "Congener" means a specific PBDE molecule.
  - (d) "Metallic recyclable" has the same meaning as a metallic discard, as defined in Section 42161 of the Public Resources Code.
- 20 <del>(a)</del>
  - (e) "OctaBDE" means octabrominated diphenyl ether or any technical mixture in which octabrominated diphenyl ether is a predominate congener.
    - <del>(b)</del>
- 25 (f) "PBDE" means polybrominated diphenyl ether.
- 26 <del>(e)</del>
  - (g) "PentaBDE" means pentabrominated diphenyl ether or any technical mixture in which pentabrominated diphenyl ether is a predominate congener.
    - (d) "Congener" means a specific PBDE molecule.
- 31 <del>(e)</del>
  - (h) "Process" does not include the processing of metallic recyclables containing PBDEs that is conducted in compliance with all applicable federal, state, and local laws.
- 35 <del>(1</del>
- 36 (i) "Product" means a product manufactured on or after June 1, 2006.
- 38 (g) "Metallic recyclable" has the same meaning as a metallic discard, as defined in Section 42161 of the Public Resources Code.
- 40 <del>(h)</del>

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1 (*j*) "Recycle" has the same meaning as defined in Section 40180 of the Public Resources Code.

<del>(i)</del>

- (k) "Technical mixture" means a PBDE mixture that is sold to a manufacturer. A technical mixture is named for the predominant congener in the mixture, but is not exclusively made up of that congener.
- SEC. 5. Section 108922 of the Health and Safety Code is amended to read:
- 108922. (a) On and after June 1, 2006, a person may not manufacture, process, or distribute in commerce a product, or a flame-retarded part of a product, containing more than one-tenth of 1 percent of pentaBDE or octaBDE, except for products containing small quantities of PBDEs that are produced or used for scientific research on the health or environmental effects of PBDEs.
- (b) Commencing January 1, 2010, all seating furniture, mattresses, box springs, mattress sets, futons, and other bedding products including, but not limited to, pillows, comforters, blankets, and sleeping bags that are sold or offered for sale by an importer, manufacturer, or wholesaler for use in this state, including any seating furniture, mattresses, box springs, mattress sets, futons, and other bedding products including, but not limited to, pillows, comforters, blankets, and sleeping bags sold to or offered for sale for use in a hotel, motel, or other place of public accommodation in this state, and reupholstered furniture to which filling materials are added, shall comply with the following:
- (1) Shall not contain brominated fire retardants or chlorinated fire retardants.
- (2) Shall be labeled with a permanent label attachment in a manner specified by the Bureau of Home Furnishings and Thermal Insulation.
- (c) All permanent label attachments required pursuant to subdivision (b) shall comply with the following:
- (1) Use plain language understandable to consumers, and in sufficient size as to be readily visible and legible.
- (2) Specify any chemical or chemicals added to achieve fire or flame retardancy.
- 39 (3) Include other markings or language specified by the Bureau 40 of Home Furnishings and Thermal Insulation.

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 (d) By March 1, 2009, the Bureau of Home Furnishings and Thermal Insulation shall replace Technical Bulletins 116 and 117 with a product performance standard for furniture that incorporates a combined approach to the use of the flame retardancy of fabrics with the fire retardancy of furniture materials and design. The new standard shall achieve fire retardancy properties sufficient to protect human lives, but without the use of brominated fire retardants and chlorinated fire retardants.

- (e) The Bureau of Home Furnishings and Thermal Insulation in consultation with the California Office of Health Hazards Assessment may review relevant scientific and medical literature as well as the findings, rulings, and regulations of the United States Consumer Product Safety Commission, the federal Centers for Disease Control and Prevention, the United States Environmental Protection Agency, the European Union, and other international, federal, and state agencies, to assess the potential health and environmental impacts of fire retardants that may be used to meet fire retardancy standards.
- (f) The Bureau of Home Furnishings and Thermal Insulation, in consultation with the California Office of Environmental Health Hazard Assessment, may adopt regulations that protect human health and safety, and the environment and may prohibit in products under its jurisdiction the use of chemicals for which the safety to human or animal health cannot be clearly established.